



CITY OF HIGH POINT

FRANK L. WARD WATER PLANT

2014 Annual Drinking Water Quality Report January – December, 2014 PSWID # NC0241020

Is My Water Safe?

We are pleased to present this years' Annual Drinking Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act(SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Where does our water come from?

High Point's water comes from a 62 square mile area known as a watershed. We do not have any large river systems, such as the Yadkin or Neuse River, to rely on. As a matter of fact, we are the first to use water from the beginning, or headwaters, of a larger river system called the Cape Fear River.

Our water comes from rainfall and runoff in an area roughly bordered by U.S. Hwy. 421 on the north(above I-40), Main Street on the southwest, N.C. Hwy. 66 on the west, Montlieu Avenue on the southeast, and Guilford College Road on the east.

The water collects in streams that flow together into what becomes the east and west forks of the Deep River. It is then collected and stored in our two lakes, Oak Hollow and City Lake. Before we can send the water to you, it needs to be treated to remove contaminants it has picked up on the way to our water supply lakes.

How does the water get to you?

Most of the water we drink is pumped from City Lake and processed into treated drinking water at the Ward Water Plant on Kivett Drive. We have a state-of-the-art treatment facility where we remove those contaminants water picks up as it is collected in our watershed.

There are four basic steps to treating water; first, we add alum (aluminum sulfate) to water, speeding the removal of most dirt and other larger particulate matter. This step is known as "settling."

Once completed, water is filtered to remove smaller pieces of debris and bacteria. The water is chemically treated to kill any remaining bacteria.

Next, fluoride is added to protect teeth and chemicals to protect pipes are included. Federal, State, and local health laws require these additives during treatment. Then, water is stored. Finally, it is pumped into homes and businesses in High Point and the surrounding areas.

Our commitment to you

The City of High Point has a state and federally certified testing program for your water that meets or exceeds all standards. The water is tested as it is being collected in the watershed, during the

treatment process, and, also, after it is delivered to homes and businesses in our community. Those results are presented in this report.

Source Water Assessment

The NC Department of Environment and Natural Resources (DENR) have conducted a Source Water Assessment of our drinking water source. The purpose of the assessment was to determine the susceptibility of the drinking water source to potential contamination.

The assessment reported a susceptibility rating of “moderate” for both Oak Hollow Lake and High Point City Lake. The rating does not imply poor water quality; rather, it signifies the system’s potential to become contaminated. The complete report may be viewed at:

<http://www.enr.state.nc.us/flighttest/pages/swap.htm>

Questions about your water?

Call the Customer Service Phone Center at (336) 883-3111, 24 hours a day, and seven days a week.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone transplants, people with HIV/AIDS or other immune systems disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice from their health care providers. The US EPA Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (888) 426-4791.

Information on the Internet

The US EPA Office of Water and the CDC web sites provide a substantial amount of information on many issues related to water resources, water conservation, and public health. Also, DENR has a web site that provides complete and current information on water issues in North Carolina, including valuable information about our watershed.

EPA: <http://water.epa.gov/>

CDC: <http://www.cdc.gov/az/w.html>

NC: <http://www.ncwater.org/>

Changes in Process

On July 25, 2011, the Ward Water Treatment Plant in High Point, Greensboro, Piedmont Triad Regional Water Authority, Burlington, and Reidsville changed their method of disinfection from free chlorine to a two-stage process. Primary disinfection is still achieved by free chlorine, but we are now using chloramines (combined chlorine and ammonia) as our secondary disinfectant. This change is to help us comply with the Stage 2 disinfectant/disinfectant by-products rule from EPA.

Consumer Water Report, June, 2014
Published by the: City of High Point, PO Box 230, High Point, NC 27261
<http://www.highpointnc.gov/>
(336) 883-3111

This information will be provided in an alternate format for people with visual impairments.

City of High Point
Public Services Dept.
Consumer Confident Report 2014

SELECTED AVERAGE VALUES

after treatment

(from monthly reports to N.C. Public Water Supply)

Ward Water Plant (Jan-Dec 2014)

PTRWA water at transfer station(Jan-Dec 2014)

Constituent	Average found	Most found	Average found	Most found
Turbidity (NTU)	0.081	0.208	0.24	0.52
Total Organic Carbon (mg/L)	2.3	2.43	2.24	3.11
Dissolved Organic Carbon (mg/L)	1.81	2.3	no data	
UV 254(m-1)	5.10	5.80	no data	
pH (std units)	8.38	8.80	8.10	8.76
Chlorine (mg/L) (Total)	3.5	4.00	3.20	3.5
Alkalinity (mg/L)	28	36	38.40	49
Hardness (mg/L)	37.5	44	43.33	60
Fluoride (mg/L)	0.742	0.91	0.53	0.67
Iron (mg/L)	<.06	<.06	<.01	0.04
Manganese (mg/L)	<.008	<.008	<.01	0.07
Sodium (mg/L)	13.40	13.40	31.20	56.3
Nitrate+Nitrate as Nitrogen (mg/L)	0.151	0.26	ND	ND
Total Phosphorus as Phosphorus (mg/L)	0.06	0.19	1.12	1.5
Total Coliform (/100ml)	<1.0	1	<1	<1
Heterotrophic bacteria (/ml)			13	96

Definitions:

NTU -

turbidity units, used only to define this measurement

mg/L -

milligrams per liter or parts per million (ppm)

pCi/L -

picocuries per liter, used only for radioactivity measurements

< -

less than

> -

greater than, both apply to numbers to indicate a bounty such as, "The number should not exceed" or "The value cannot be measured below this number" (Maximum Contaminant Level) the greatest amount allowed in your water by law that determines whether it is safe or not.

MCL -

(Maximum Contaminant Level Goal) This would be the ideal situation. This may or may not exist anywhere on earth, but it is the best we wish we could achieve.

MCLG -

(Maximum Contaminant Level Goal) This would be the ideal situation. This may or may not exist anywhere on earth, but it is the best we wish we could achieve.

MFL -

measurable fiber length.

Heterotrophic -

a group of bacteria that is a general indicator of many bacteria but are not health threatening.

Coliform -

a group of very resistant bacteria usually associated with disease.

ND -

Not detected

Microbiological Contaminants in the Distribution System					
Contaminant (units)	MCL violation	Your water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	N	* 1%	0	5% of monthly samples are positive	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	N	0	0	0 (Note: The MCL is exceeded if a routine sample and repeat sample are total coliform positive, and one is also fecal or <i>E. coli</i> positive)	Human and animal fecal waste

* Note: On 8/12/2014 a positive coliform sample was collected. All repeat samples were negative.

Required Safe Drinking Water Act Regulated Constituents Tested or Detected - Jan - Dec 2014

After treatment Ward Water Plant				After Treatment at the PTRWA plant				Potential Health Effect	Source
Constituent	last found	Last tested		last found	Last tested	MCL(1)	MCLG(2)		
pH (std units)	8.14	11/24/2014		7.97	12/29/2014	>6.5	no limit	none	none
Fluoride (mg/L)	<.10	11/24/2014		0.57	12/29/14	<4	<4	Skeletal and dental fluorosis	natural, fertilizer, aluminum industry, water treatment
Sodium (mg/L)	18.4	11/24/2014		46.8	12/29/14	no limit	no limit	none	none
Sulfate (mg/L)	21	11/24/2014		54.1	12/29/14	no limit	no limit	diarrhea	natural deposits, water production
Nitrate (mg/L)	<1.00	12/2/2014		0.19	12/29/14	<10	no limit		animal waste, fertilizer, natural deposits, septic tanks, sewage
Nitrite (mg/L)	<0.10	12/2/2014		ND		no limit	no limit	methemoglobinemia	
Total Coliform (/100ml)	0	12/31/14		0	12/29/2014	<5% of tests	none	stomach upset	human and animal waste
Total Trihalomethanes (8 sites with a 4 quarter Local Running Annual Average) (mg/L)						< 0.080	no limit	cancer, suspected in pre-mature birth	by-product of disinfecting drinking water
B01	0.035	11/13/2014							
B02	0.042	11/13/2014							
B03	0.039	11/13/2014							
B04	0.049	11/13/2014							
B05	0.048	11/13/2014							
B06	0.043	11/13/2014							
B07	0.037	11/13/2014							
B08	0.035	11/13/2014							
Total Haloacetic Acids (8 sites with a 4 quarter Local Running Annual Average) (mg/L)						< 0.060	no limit	cancer, suspected in pre-mature birth	by-product of disinfecting drinking water
B01	0.028	11/13/2014							
B02	0.032	11/13/2014							
B03	0.029	11/13/2014							
B04	0.034	11/13/2014							
B05	0.027	11/13/2014							
B06	0.036	11/13/2014							
B07	0.028	11/13/2014							
B08	0.028	11/13/2014							

Stage 2
DBP's

On July 25, 2011 the City of High Point changed it's Secondary disinfection to Chloramines (combined chlorine and ammonia). Primary disinfection is still free chlorine. Starting in 2013 High Point is required to sample 8 sites for TTHM's and HAA's know as the Stage 2 DBP Rule using a Local Running Annual Average instead of a rolling average of our 4 original sites.